

Amendment under 37 CFR §1.111
Application No. 10/564,091
Attorney Docket No. 053482

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Listing of Claims

Claim 1 (Currently amended): A method for washing a textile product without using a detergent, comprising:

providing a textile product by subjecting a fiber or a fiber product to a hydrophilization treatment, the textile product having increased a moisture absorption ratio;

applying an oily component to the textile product; and

washing the textile product with water without using a detergent, wherein a carboxyl group is directly introduced into the textile product by carboxymethylation.

Claim 2 (Previously presented): The method for washing a textile product without using a detergent according to Claim 1,

wherein the hydrophilization treatment is carried out by at least one method selected from a group consisting of a method for introducing a hydrophilic group, a method for introducing a hydrophilic molecule, a method for improving the surface physically, and a method for applying a coating agent containing a hydrophilic substance.

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Claim 3 (Previously presented): The method for washing a textile product without using a detergent according to Claim 1,

providing a textile product by subjecting a fiber or a fiber product to a hydrophilization treatment;

applying an oily component to the textile product; and

washing the textile product with water without using a detergent,

wherein the fiber or fiber product contains at least a cellulose fiber, and the moisture absorption ratio of the cellulose fiber is adjusted to be 7.1% or higher by the hydrophilization treatment.

Claim 4 (Canceled)

Claim 5 (Previously presented): The method for washing a textile product without using a detergent according to Claim 4,

wherein the cellulose fiber is brought into contact with a treatment solution containing an alkali metal hydroxide in a concentration of 20 to 100 g/L, monochloroacetic acid or a monochloroacetic acid alkali metal salt in a concentration of 100 to 400 g/L at 10 to 40°C for 6 to 48 hours.

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Claim 6 (Previously presented): The method for washing a textile product without using a detergent according to Claim 4,
wherein the carboxymethylation degree is adjusted to be 0.1 to 10% by mole.

Claim 7 (Previously presented): The method for washing a textile product without using a detergent according to Claim 3,
wherein graft polymerization to the cellulose fiber is carried out using at least one kind of monomer selected from a group consisting of methacrylamide, hydroxyethyl acrylate, acrylic acid, and methacrylic acid.

Claim 8 (Previously presented): The method for washing a textile product without using a detergent according to Claim 7,
wherein the grafting ratio is adjusted to be 1 to 20%.

Claims 9-16 (Canceled)

Claim 17 (Currently amended): The method for washing a cellulose product without using a detergent, comprising:

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providing a treatment solution containing an alkali metal hydroxide in a concentration of 20 to 100 g/L, monochloroacetic acid or a monochloroacetic acid alkali metal salt in a concentration of 100 to 400 g/L at a temperature of 10 to 40°C;

contacting a cellulose fiber with the treatment solution for 6 to 48 hours;

causing carboxymethylation to introduce a carboxyl group into the cellulose fiber at a carboxymethylation degree of 0.1 to 10% by mole so as to obtain a cellulose product, wherein the cellulose fiber of the cellulose product has a moisture absorption ratio of 7.1% or higher;

applying an oily component to the cellulose product; and

washing the cellulose product with water without using a detergent, wherein a carboxyl group is directly introduced into the cellulose fiber by carboxymethylation.

Claim 18 (Previously presented): The method for washing a cellulose product without using a detergent according to Claim 17,
wherein graft polymerization to the cellulose fiber is carried out using at least one kind of monomer selected from a group consisting of methacrylamide, hydroxyethyl acrylate, acrylic acid, and methacrylic acid.

Claim 19 (Previously presented): The method for washing a cellulose product without using a detergent according to Claim 18, wherein a grafting ratio is adjusted to be 1 to 20%.

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Claim 20 (Currently amended): The method for washing a cellulose product without using a detergent, comprising:

providing a treatment solution containing an alkali metal hydroxide in a concentration of 20 to 100 g/L, monochloroacetic acid or a monochloroacetic acid alkali metal salt in a concentration of 100 to 400 g/L at a temperature of 10 to 40°C;

contacting a cellulose fiber with the treatment solution for 6 to 48 hours;

carrying out a hydrophilization treatment to introduce a carboxyl group into the cellulose fiber at a carboxymethylation degree of 0.1 to 10% by mole, wherein the carboxyl group is directly introduced into the cellulose fiber by carboxymethylation, wherein the cellulose fiber after the hydrophilization treatment has increased a moisture absorption ratio;

applying an oily component including oleic acid to the cellulose fiber after the hydrophilization treatment; and

washing the cellulose fiber after the hydrophilization treatment with water without using a detergent at remaining ratio of 10 to 42 %.

Claim 21 (Previously presented): The method for washing a cellulose product without sing a detergent according to Claim 20,

wherein graft polymerization to the cellulose fiber is carried out using at least one kind of monomer selected from a group consisting of methacrylamide, hydroxyethyl acrylate, acrylic acid, and methacrylic acid.

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Claim 22 (Previously presented): The method for washing a cellulose product without using a detergent according to Claim 20, wherein a grafting ratio is adjusted to be 1 to 20%.